

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-48 (canceled).

Claim 49 (new): A display system comprising:

a dimming device capable of switchably presenting a light reflecting state or a light transmitting state; and

a display device for displaying information by modulating light transmitted through the dimming device and/or light reflected by the dimming device,

wherein the dimming device has a plurality of regions each being independently capable of switchably presenting a light reflecting state or a light transmitting state, and, when a plurality of types of information are being displayed on the display device, the dimming device is capable of selectively switching between the light reflecting state or the light transmitting state of each of the plurality of regions in accordance with the types of information being displayed.

Claim 50 (new): The display system of claim 49, wherein the display device supplies a display signal to a first display region for performing display by modulating the light transmitted through the dimming device, and supplies a display signal to a second display region for performing display by modulating the light reflected by the dimming device, the display signals being of different types.

Claim 51 (new): The display system of claim 49, wherein,
the display device has a plurality of pixels; and
each of the plurality of regions of the dimming device corresponds to each
of the plurality of pixels in a one-to-one relationship.

Claim 52 (new): The display system of claim 49, wherein,
the dimming device is a dimming device having a layered structure
including a first layer and a second layer, such that a light reflectance of the first layer
changes in response to an external stimulation;
the first layer contains a first material whose optical characteristics change
in accordance with a concentration of a specific element; and
the second layer contains a second material capable of containing the
specific element, the second material releasing or absorbing the specific element in
accordance with the external stimulation.

Claim 53 (new): The display system of claim 49, wherein,
the dimming device is a dimming device comprising a dimming layer
whose light reflectance changes in response to an external stimulation; and
the dimming layer contains a first material whose optical characteristics
change in accordance with a concentration of a specific element, the first material being
particles.

Claim 54 (new): A display system comprising:

a dimming device capable of switchably presenting a light reflecting state or a light transmitting state; and

a display device for performing display by modulating incident light, wherein,

the dimming device is a dimming device having a layered structure including a first layer and a second layer, such that a light reflectance of the first layer changes in response to an external stimulation;

the first layer contains a first material whose optical characteristics change in accordance with a concentration of a specific element; and

the second layer contains a second material capable of containing the specific element, the second material releasing or absorbing the specific element in accordance with the external stimulation.

Claim 55 (new): The display system of claim 54, wherein the display device performs display by modulating light transmitted through the dimming device and/or light reflected by the dimming device.

Claim 56 (new): The display system of claim 54, wherein the element is hydrogen, and the first material is able to transition between a light reflecting state and a light transmitting state in accordance with a hydrogen concentration.

Claim 57 (new): The display system of claim 56, wherein the second layer

contains a hydrogen storage material.

Claim 58 (new): The display system of claim 57 operating in a region where respective hydrogen equilibrium pressure-composition isotherms (PTC characteristic curves) of the first layer and the second layer are substantially flat.

Claim 59 (new): The display system of claim 58, wherein, in the region where the PTC characteristic curves are substantially flat, hydrogen equilibrium pressures of the first layer and the second layer are about the same.

Claim 60 (new): The display system of claim 59, wherein a range of hydrogen storage amount of the second layer in the region where the PTC characteristic curve is substantially flat encompasses a range of hydrogen storage amount of the first layer in the region where the PTC characteristic curve is substantially flat.

Claim 61 (new): The display system of claim 54, wherein the second material releases or absorbs the specific element through exchanges of electrons.

Claim 62 (new): The display system of claim 54, wherein the second material releases or absorbs the specific element in response to light irradiation.

Claim 63 (new): The display system of claim 62, wherein the second layer contains a material having a photocatalytic ability.

Claim 64 (new): The display system of claim 54, comprising a pair of conductive layers for forming an electric field for causing ions of the specific element to move from the second material to the first material, or from the first material to the second material.

Claim 65 (new): The display system of claim 64, wherein the first and second layer are positioned between the pair of conductive layers.

Claim 66 (new):. The display system of claim 64, wherein the first layer has conductivity, and functions as one of the pair of conductive layers.

Claim 67 (new): The display system of claim 64, wherein the second layer has conductivity, and functions as one of the pair of conductive layers.

Claim 68 (new): The display system of claim 54, wherein the second layer has a light transmitting ability.

Claim 69 (new): The display system of claim 54, wherein at least one of the first layer and the second layer has a multi-layer structure.

Claim 70 (new): A display system comprising:
a dimming device capable of switchably presenting a light reflecting state or a light transmitting state; and

a display device for performing display by modulating incident light,
wherein,

the dimming device is a dimming device comprising a dimming layer
whose light reflectance changes in response to an external stimulation; and

the dimming layer contains a first material whose optical characteristics
change in accordance with a concentration of a specific element, the first material being
particles.

Claim 71 (new): The display system of claim 70, wherein the display device
performs display by modulating light transmitted through the dimming device and/or light
reflected by the dimming device.

Claim 72 (new): The display system of claim 70, wherein the first material is able
to transition between a light reflecting state and a light transmitting state in accordance
with the concentration of the specific element.

Claim 73 (new): The display system of claim 72, wherein the dimming layer
diffuse-reflects light when the first material is in the light reflecting state.

Claim 74 (new): The display system of claim 70, wherein a diameter of the
particles is equal to or greater than 350 nm and equal to or less than a thickness of the
dimming layer.

Claim 75 (new): The display system of claim 70, wherein the specific element is hydrogen.

Claim 76 (new): The display system of claim 70, further comprising a conversion layer containing a second material capable of containing the specific element, wherein the second material releases or absorbs the specific element in accordance with the external stimulation.

Claim 77 (new): The display system of claim 76, wherein the specific element is hydrogen, and the conversion layer contains a hydrogen storage material.

Claim 78 (new): The display system of claim 77 operating in a region where respective hydrogen equilibrium pressure-composition isotherms (PTC characteristic curves) of the dimming layer and the conversion layer are substantially flat.

Claim 79 (new): The display system of claim 78, wherein, in the region where the PTC characteristic curves are substantially flat, hydrogen equilibrium pressures of the dimming layer and the conversion layer are about the same.

Claim 80 (new): The display system of claim 79, wherein a range of hydrogen storage amount of the conversion layer in the region where the PTC characteristic curve is substantially flat encompasses a range of hydrogen storage amount of the dimming layer in the region where the PTC characteristic curve is substantially flat.

Claim 81 (new): The display system of claim 70, wherein the second material releases or absorbs the specific element through exchanges of electrons.

Claim 82 (new): The display system of claim 70, wherein the second material releases or absorbs the specific element through an electrochemical reaction.

Claim 83 (new): The display system of claim 70, comprising a pair of conductive layers for forming an electric field for causing ions of the specific element to move from the second material to the first material, or from the first material to the second material.

Claim 84 (new): The display system of claim 83, wherein the dimming layer and the conversion layer are positioned between the pair of conductive layers.

Claim 85 (new): The display system of claim 83, wherein the dimming layer has conductivity, and functions as one of the pair of conductive layers.

Claim 86 (new): The display system of claim 83, wherein the conversion layer has conductivity, and functions as one of the pair of conductive layers.

Claim 87 (new): The display system of claim 70, wherein the conversion layer has a light transmitting ability.

Claim 88 (new): The display system of claim 70, wherein at least one of the dimming layer and the conversion layer has a multi-layer structure.

Claim 89 (new): The display system of claim 49, wherein the display device is a liquid crystal display device including a pair of substrates and a liquid crystal layer provided between the pair of substrates.

Claim 90 (new): The display system of claim 49, further comprising an illumination device disposed on an opposite side from a viewer with respect to the display device.

Claim 91 (new): The display system of claim 90, wherein the dimming device is disposed between the display device and the illumination device.

Claim 92 (new): The display system of claim 49, wherein the dimming device is disposed inside the display device.

Claim 93 (new): The display system of claim 49, wherein the display device includes a first color filter.

Claim 94 (new): The display system of claim 49, wherein the dimming device includes a second color filter.

Claim 95 (new): The display system of claim 54, wherein the display device includes a first color filter; the dimming device includes a second color filter; and the second color filter is disposed on an opposite side from a viewer with respect to the first layer.

Claim 96 (new): The display system of claim 70, wherein the display device includes a first color filter; the dimming device includes a second color filter; and the second color filter is disposed on an opposite side from a viewer with respect to the dimming layer.